

IN THE CLAIMS:

1. (Currently amended) A method for manufacturing a semiconductor device, comprising the steps of:

forming, in a semiconductor layer formed on a first insulating film, an element isolation groove extending to the first insulating film;

depositing a second insulating film so as to partially fill the element isolation groove by using a vapor deposition method;

C forming an embedded layer on the second insulating film so as to completely fill the element isolation groove; and

forming a third insulating film on the embedded layer,

wherein the step of forming the element isolation groove includes another step of forming ~~an other element isolation groove adjacent to the element isolation groove in a region other than an element formation region of the semiconductor layer~~ a plurality of element isolation grooves with respect to one element formation region of the semiconductor layer,

wherein in the step of ~~forming~~ ^{forming} the third insulating film, the third insulating film is formed such that the ~~[element isolation groove and the other element isolation groove~~ plurality of element isolation grooves are continuously covered, and

wherein the second insulating film and the third insulating film are composed of SiO₂.

Claims 2-3 (Cancelled)

4. (Original) The method according to Claim 1, further comprising, between the step of forming the element isolation groove and the step of depositing the second insulating film, the step of forming an oxide film by oxidizing the semiconductor layer at a wall surface of the element isolation groove, wherein the step of depositing the second insulating film includes the step of depositing the second insulating film so as to cover the oxide film.

5. (Original) The method according to Claim 4, wherein the oxide film has a thickness of 50 nm or less.
